

ABSTRACT

5 A furnace for energy saving and space reduction used in electronic  
industry assembly, medical sterilization, or food process application is  
provided. In the furnace there is a number of trays hinged on a pair of  
continuous chains which movement is in a circle or oval trajectory, or on  
the rotating beam mechanism constituting as spider web form. A pair of  
rings is added to restrain the swing movement of each tray via the  
mechanical linkage during rotation. A dome formed at the top portion  
10 inside the furnace is used as an enclosure where the heated inert gas is  
almost kept. The electric power for heater and blower can be reduced by  
the natural convection. An opening is located at the lower portion of the  
furnace; so the operator can do loading and unloading performance.

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